

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 – 42. (Cancelled)

43. (Previously presented) An antibacterial vascular prosthesis prepared by a process comprising the steps of:

- (a) providing a porous basic structure;
- (b) depositing silver onto the surface of the porous basic structure by means of an ion beam assisted deposition technique; and
- (c) impregnating the silver coated porous basic structure with an absorbable material.

44. (Currently amended) The antibacterial vascular prosthesis of claim 43[[1]] wherein the porous basic structure is made of substantially non-absorbable or only slowly absorbable polymer material.

45. (Currently amended) The antibacterial vascular prosthesis of claim 44[[2]] wherein the substantially non-absorbable or only slowly absorbable polymer material is selected from the group consisting of polyester, polytetrafluoroethylene, polyurethane and polyamide.

46. (Currently amended) The antibacterial vascular prosthesis of claim 43[[1]] wherein the porous basic structure is made of sintered material.

47. (Currently amended) The antibacterial vascular prosthesis of claim 46[[4]] wherein the sintered material is polytetrafluoroethylene.

48. (Currently amended) The antibacterial vascular prosthesis of claim 43[[1]] wherein the porous basic structure is coated with silver at least at the locations which point toward at least one surface of the prosthesis.

49. (Currently amended) The antibacterial vascular prosthesis of claim 48[[6]] wherein substantially the entire surface of the porous basic structure ~~fibers are~~ is coated with silver.

50. (Currently amended) The antibacterial vascular prosthesis of claim 43[[1]] wherein the absorbable material coating comprises cross-linked biological material.

51. (Currently amended) The antibacterial vascular prosthesis of claim 43[[1]] wherein the absorbable material coating comprises synthetic polymers and copolymers which are absorbable in vivo.

52. (Currently amended) The antibacterial vascular prosthesis of claim 43[[1]] wherein the absorbable material coating further comprises one or more active substances.

53. (Currently amended) The antibacterial vascular prosthesis of claim 43[[1]] wherein the silver layer comprising pure elemental silver having a thickness of 1000 Å to 2500 Å.

54. (Currently amended) The antibacterial vascular prosthesis of claim 43[[1]] wherein silver atoms of the silver layer are impressed into the polymer surface and the silver layer adapts to the surface structure of the porous basic structure so that the pores retain their original shape and size.

55. (Currently amended) The antibacterial vascular prosthesis of claim 43[[1]] wherein the absorbable material coating seals the porous basic structure.